



PATENT  
Docket No. 00403.CN1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Benson et al. ) Group Art Unit: 1631  
Serial No.: 10/028,224 ) Examiner: Carolyn L. Smith  
Confirmation No.: 4497 )  
Filed: December 21, 2001 )

For: CRYSTALLIZATION AND STRUCTURE DETERMINATION OF  
GLYCOSYLATED HUMAN BETA SECRETASE, AN ENZYME  
IMPLICATED IN ALZHEIMER'S DISEASE

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RESPONSE TO RESTRICTION REQUIREMENT

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Restriction Requirement mailed May 12, 2003, Applicants elect, with traverse, Group IX (claims 72-76), drawn to a crystal of beta secretase. Applicants' Representatives reserve the right to pursue examination of the non-elected claims in continuation or divisional applications. Applicants respectfully request reconsideration of the restrictions in this case and submit that the inventions as claimed can be readily evaluated in one search without placing undue burden on the Examiner.

Specifically, Applicants request that the Examiner reconsider the restriction requirement and rejoin Group VIII (claims 54-71, drawn to a method for crystallizing a human beta secretase molecule or molecular complex) and Group X (claims 77-78, drawn to a method of producing human beta secretase) with elected Group IX (claims 72-76). Applicants respectfully submit that Groups VIII, IX, and X can be can be readily evaluated in one search without placing undue burden on the Examiner.

In the event that the restriction requirement is reconsidered and Groups VIII and X are rejoined with elected Group IX, the Examiner has required an Election of Species for each

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of Groups VIII and X. In response to the three required Election of Species for Group VIII, Applicants elect, with traverse, Species J (a salt which is a combination of salts), Species K (a glycol which is PEG), and Species P (a human beta secretase which is isolated from mammalian cells). In response to the single required Election of Species for Group X, Applicants elect, with traverse, Species R (a cell line which is mammalian). These elections are without traverse only to the extent that it is understood that (a) the requirement will be withdrawn upon the finding of an allowable genus; and (b) any species withdrawn from consideration will be transferred to the elected subject matter unless it is found patentably distinct from the elected or allowed claims. Applicants traverse on the grounds that the generic claim includes sufficiently few species that a search and examination of all the species at one time would not impose a serious burden on the Examiner.

#### **SEQUENCE LISTING REQUIREMENTS**

The Examiner also alleged that the present application failed to comply with the requirements of 37 C.F.R. §§1.821-1.825. Applicants address the Examiner's allegation in the Preliminary Amendment submitted herewith.

Applicants respectfully request that the objection to the sequence listing requirements be withdrawn.

#### **CORRECTION OF DRAWINGS**

The Examiner required correction of the drawings as noted in the PTO-948 form. Applicants address the Examiner's requirement for corrected drawings in the Submission of Drawings under 37 C.F.R. §1.85 submitted herewith.

Applicants respectfully request that the objection to the drawings be withdrawn.

**Response to Restriction Requirement**

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**CONCLUSION**

The Examiner is invited to contact Applicants' Representatives at the below-listed telephone number, if there are any questions regarding this Response to Restriction Requirement and Preliminary Amendment or if prosecution of this application may be assisted thereby.

Respectfully submitted for

**Benson et al.**

By

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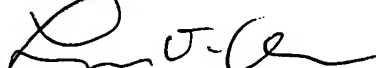
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PATENT TRADEMARK OFFICE

June 11, 2003  
Date

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I hereby certify that this paper and/or fee is/are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Assistant

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Name: **SAM HER**



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**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Prior to taking up the above-identified application for examination, please amend the application as follows:

**In the Specification**

Please replace the paragraph beginning at page 12, line 2, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate the changes made.

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--Figure 2 is the synthetic peptide Ser-Glu-Val-Asn-Sta-Val-Ala-Glu-Phe-Arg-Gly-Gly-Cys (where Sta = statine) (SEQ ID NO:3), PNU-292593E, used for affinity purification of beta secretase.--

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Please replace the paragraph beginning at page 40, line 25, with the following rewritten paragraph. Per 37 C.F.R. §1.121, this paragraph is also shown in Appendix A with notations to indicate the changes made.